

HP ProLiant DL585 G7 Server

Delivering 4P performance at 2P economics

Data sheet

Are you looking to deploy solutions that meet your business needs in a budget-constrained environment? Get high performance and flexibility with the all-new HP ProLiant DL585 G7 Server – easy on your pocket and ideal for server virtualisation, server consolidation, multi-tiered enterprise application and corporate infrastructure applications.

HP continues to raise the bar on technology innovation and engineering excellence. The new HP ProLiant DL585 G7 server delivers industry-leading efficiencies to reduce costs in both capital as well as operating budgets.

The new HP ProLiant DL585 G7 server features the latest scale-up AMD Opteron 6100 series processors with up to 12 cores per CPU, supports up to 512 GB memory footprint, and up to 11 PCIe 2.0 I/O slots (all full-length/full-height). This perfect balance of having a new system architecture, extensive memory capacity and I/O throughput significantly accelerates virtualisation and removes performance bottlenecks. The best part is that the HP ProLiant DL585 G7 server is the first server that can pay for itself in as little as 30 days, delivering 4P performance at 2P economics.¹

To improve power consumption, many HP ProLiant servers now offer new power options, including Common Slot Power Supplies. These power supplies come in with multiple power ratings that offer the right size solution to fit your configuration. This provides improved power delivery and the advantage of reclaiming lost power that helps maintain high server availability and reduces cost of downtime. HP Thermal Logic reduces, reclaims and extends the life of the data centre with HP Thermal Logic technologies, which helps to triple data centre capacity.

To build a Converged Infrastructure, HP offers servers that are designed to increase efficiency, simplify operations and deliver automated intelligence in highly-virtualised environments. Like other recent HP ProLiant servers, DL585 G7 server is also a part of the HP Converged Infrastructure portfolio, which integrates servers, storage, network devices and facility resources into a common environment. It enables data centres to respond quickly in an agile business environment. HP ProLiant servers provide modular, standards-based building blocks that help data centres advance towards a Converged Infrastructure.

With a wide range of features, the DL585 G7 server delivers higher performance at a lower price helping you to meet strategic business needs in this competitive environment.

What's new?

The DL585 G7 server is now available with the following robust and exciting new features:

- New AMD Opteron 6100 series processors with up to 12 cores per CPU, 12 MB cache, AMD Direct Connect Architecture 2.0
- HP iLO 3, part of HP Insight Control for proven management solutions
- Up to 512 GB of DDR3 expandable memory
- Up to 11 PCIe 2.0 expansion slots (all full-length/full-height) – more I/O and network bandwidth
- 10 Gb NIC upgrade option, solid state drives (SSD) option, FBWC and Trusted Platform Module (TPM)

¹ Based on HP internal testing comparing hardware on DL360 G4 to DL585 G7



Key features and benefits

Gain high performance and scalability at lower price

- **Highly expandable:** Scale up your IT infrastructure as your business grows with the DL585 G7 server, which includes features such as refined I/O expansion capabilities, latest 12-core AMD processors and expandable DDR3 memory.
- **Virtualisation ready:** Set up or expand virtualisation in your data centre with 4P architecture, more memory up to 512 GB, 10 Gb NIC upgrade option, 11 I/O slots and industry-leading management solutions.
- **Get more for less:** Deploy high performance servers equipped with features like high performing AMD 6000 series processor, faster memory access, higher network and I/O bandwidths at an affordable price.

Breakthrough efficiency and simplicity with industry-leading management solutions

HP Insight Control is essential server management software that unlocks the management capabilities built into your HP ProLiant servers. HP Insight Control helps you deploy ProLiant servers quickly, proactively manage the health of virtual or physical servers, improve power consumption and take complete remote control even from outside the office. HP Insight Control/Insight Dynamics reduces operational expenses by US\$48,300 per 100 users over 3 years.² HP Integrated Lights-Out 3 (iLO 3), delivers remote console performance 800 per cent faster than iLO 2 – so it's as good as being there in person – and 360 per cent faster than Virtual Media³, so everyday maintenance and deployment can be done in a fraction of the time. It sends alerts from iLO 3 regardless of the state of the host server, and it helps you access advanced troubleshooting features. Now you can manage your data centre remotely – significantly reducing the expense for onsite personnel and travel time to server site.

iLO 3, is a standard component of the HP ProLiant DL585 G7 Server, that facilitates server health and remote server manageability. As it includes an intelligent microprocessor, secure memory and a dedicated network interface, iLO 3 is independent of the host server and its operating system.

Insight Control helps you manage HP servers running Microsoft® Windows®, Linux, VMware and Citrix XenServer environments. In addition, you can integrate Insight Control with leading third-party enterprise management consoles, such as Microsoft System Center and VMware vCenter Server.

For more information about HP Insight Control and Integrated Lights-Out 3 (iLO 3) for ProLiant features, visit: www.hp.com/go/insightcontrol

Improve efficiency, flexibility and reliability

- **Lower power usage:** The DL585 G7 server improves performance while keeping power consumption at the same level with features like efficient power supply options, HP power adviser, HP Insight Control and the latest AMD 12-core processor.
- **Fits easily to enterprise deployments and supports all industry standard OS:** The DL585 G7 server provides support for the industry's most popular operating systems, including Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, Sun Solaris and VMware. Also it is designed to fit into existing enterprise data centres, with support for full line of HP Smart Array controllers, NICs and storage options.
- **Built-in reliability and availability:** Reduces cost of downtime with the high-availability features such as 4 Hot Plug Redundant (N+1) Fans Standard on all models, hot-plug, Common Slot Power Supplies, FBWC and AMD advanced RAS features.

Lay the foundation of Converged Infrastructure

- **Complete portfolio:** HP offers a complete portfolio of standards-based, integrated solutions and services developed specifically to solve the complexities of the data centre. Offered as common building blocks for a Converged Infrastructure, HP servers set the standard in ease of management, energy efficiency and better return on investment.
- **HP ProLiant innovation:** HP is accelerating innovation with a new level of automation, simplicity, interoperability and integration solutions that enable data centres to meet the growing demands of businesses. HP innovative solutions help in transforming IT environments into highly automated, virtualised data centres. These solutions are designed to dramatically reduce maintenance and operational costs – while increasing agility, computing power and data capacity at the same time.

² Based on HP internal testing comparing to iLO 2 IDC White Paper Sponsored by HP, Gaining Business Value and ROI with HP Insight Control, Doc no. 218069, May 2009

³ HP Performance Engineering Team, 2010 benchmark

HP ProLiant DL585 G7 Server



Processor and memory	
Chipset	AMD SR5690/SP5100
Processor type	AMD Opteron 6000 series processors
Number of Processors	2 or 4
Available processors	AMD Opteron 6176 SE processor (12 cores, 2.30 GHz, 12M, 105W ACP*) AMD Opteron 6174 processor (12 cores, 2.20 GHz, 12M, 80W ACP) AMD Opteron 6172 processor (12 cores, 2.10 GHz, 12M, 80W ACP) AMD Opteron 6168 processor (12 cores, 1.90 GHz, 12M, 80W ACP) AMD Opteron 6164 HE processor (12 cores, 1.70 GHz, 12M, 65W ACP) AMD Opteron 6136 processor (8 cores, 2.40 GHz, 12M, 80W ACP)
Processor core	12 or 8, core
Cache memory	Up to 12 MB shared L3 cache
Maximum processor speed	2.4 GHz
Memory type	PC3-10600E DDR3
Maximum memory	512 GB
Memory slots	48 DIMM slots
Advanced memory protection	Advanced error checking and correcting
Drives supported	Up to eight hot plug small form-factor SAS/SATA/SSD
Expansion slot	Up to 11 FL/FH I/O slots Base: 2 PCIe 2.0 x16, 3 PCIe 2.0 x8 Optional Mezzanines 2 PCIe 2.0 x16, 4 PCIe 2.0 x8 1 PCIe 2.0 x16, 2 PCIe 2.0 x8, 1 PCIe 2.0 x4, 2 PCI-X
Network controller	NC375i Quad Port 1GbE Multi-function NIC; optional Dual Port 10GbE upgrade
Storage controller	Smart Array P410i/1 GB FBWC controller Smart Array P410i/512 MB FBWC controller
Deployment	
Form factor	Rack
Rack height	4U
Remote management	HP Integrated Lights-Out 3
Power supply type	Common slot hot-plug redundant power supply
System fans features	4 Hot plug, (N+1) Redundancy
Warranty – years(s) (parts/labour/onsite)	3/3/3

* Average CPU Power

Ideal environments and applications

The DL585 G7 server is well suited for the following environments:

- Virtualisation and consolidation environment
- Multi-tiered enterprise applications environment
- Performance intensive environments

The DL585 G7 server is ideal for:

- Web applications
- Mail server applications
- VMware Elastic Sky X (ESX) applications
- Oracle E-business Suite (EBS) applications
- Microsoft Hyper-V and SQL applications
- System Application Programming (SAP) ERP applications

HP Financial Services

HP Financial Services provides innovative financing and financial asset management programmes to help you cost-effectively acquire, manage and ultimately retire your HP solutions. For more information on these services, contact your local HP representative, or visit: www.hp.com/go/hpfinancialservices

HP Services

When Technology Works. Business Works

The challenge of virtually every IT organisation is similar: To develop and maintain an agile, efficient server infrastructure that delivers the service levels your business needs. HP Technology Services offer a comprehensive range of HP Care Pack Services to help design, deploy, manage and support your IT environment, enabling cost-effective upgrades to standard warranty with easy-to-buy, easy-to-use support packages.

Minimum recommended HP Care Pack offerings

- 3-year, 4-hour response on site 24-hour x 7-day coverage, hardware support
- Server installation and start up service

Related HP Care Pack Service offerings

- 3-year, Support Plus 24: 24-hour x 7-day coverage, integrated hardware and software OS support
- 3-year, Proactive Select delivers flexibly priced consultancy. Purchase service credits and obtain expertise when needed

Benefit from HP Care Pack Services, helping you:

Reduce deployment time and manage ProLiant server solutions smoothly and efficiently increase uptime and performance of servers availability to your business. Detect, diagnose and repair problems to quickly save time, money and resources.

For more information, visit: www.hp.com/services/proliant or www.hp.com/go/proliant/carepack

To understand how to deploy the cost-effective HP ProLiant DL585 G7 server and gain higher performance, flexibility and manageability features that help fine-tune your infrastructure visit: www.hp.com/servers/dl585-g7

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